

WHAT IS CLAIMED IS:

1. A method for managing a cache on a mobile device, comprising the steps of:
receiving a call for loading a set of files, said set of files including an
application or data;
searching a database for a matching record to said set of files;
based on said matching record, determining if said set of files is out-of-date or
if a scheduled update is overdue;
updating said set of files if it is out-of-date;
performing a status check or update if said scheduled update is overdue; and
loading said set of files if it is not out-of-date and said scheduled update is not
overdue.
2. The method of claim 1, further comprising the step of:
loading an updated set of files after an update or status check is complete.
3. The method of claim 1, wherein said updating step includes the steps of:
opening a communications session with a gateway or a remote server;
sending an update request to said gateway or said remote server;
receiving an update response, said response including at least one difference
file for updating said set of files;
closing said communications session; and
updating a local file system and said database based on said update response.
4. The method of claim 3, wherein said step of updating a local file system and
said database includes the steps of:
loading said at least one difference file into a random access memory;
loading a copy of said set of files into said random access memory;
applying said at least one difference file on said set of files in said random
access memory to obtain an updated set of files;
copying said updated set of files into said local file system;
removing said set of files from said local file system;
updating said database based on said updated set of files; and
removing said at least one difference file and said set of files from said random
access memory.

5. The method of claim 4, further comprising the steps of:
executing said updated set of files; and
removing said updated set of files from said random access memory.

6. The method of claim 4, wherein said step of applying said at least one difference file includes the steps of:
parsing said at least one difference file to determine whether to add, modify, or delete a file in said set of files; and
updating said local file system and said database based on said parsing.

7. The method of claim 3, further comprising the steps of:
parsing said update response for a broadcast message;
accessing and updating said database based on said broadcast message;
sending a broadcast response to said gateway or said remote server.

8. The method of claim 7, wherein said accessing and updating steps include the step of:
selectively marking at least one set of files as out-of-date.

9. The method of claim 1, wherein said step of performing a status check or update includes the steps of:
opening a communications session with a gateway or a remote server;
sending a status check or update request to said gateway or said remote server;
receiving a status check or update response from said gateway or said remote server;
closing said communications session; and
updating a local file system and a database if at least one difference file is included in said status check or update response.

10. The method of claim 9, wherein said step of updating a local file system and a database includes the steps of:
loading said at least one difference file into a random access memory;
loading a copy of said set of files into said random access memory;
applying said at least one difference file on said set of files in said random access memory to obtain an updated set of files;
copying said updated set of files into said local file system;

removing said set of files from said local file system;
updating said database based on said updated set of files; and
removing said at least one difference file and said set of files from said random
access memory.

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11. The method of claim 10, wherein said step of applying said at least one
difference file includes the steps of:

parsing said at least one difference file to determine whether to add, modify, or
delete a file in said set of files; and

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updating said local file system and said database based on said parsing.

12. The method of claim 9, further comprising the steps of:

parsing said status check or update response for a broadcast message;

selectively marking at least one set of files as out-of-date based on said

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broadcast message; and

sending a broadcast response to said gateway or said remote server.

13. A computer program product for managing a cache on a mobile device,
comprising:

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logic code for receiving a call for loading a set of files, said set of files
including an application or data;

logic code for searching a database for a matching record to said set of files;

logic code for determining if said set of files is out-of-date or if a scheduled
update is overdue based on said matching record;

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logic code for updating said set of files if it is out-of-date;

logic code for performing a status check or update if said scheduled update is
overdue; and

logic code for loading said set of files if it is not out-of-date and said scheduled
update is not overdue.

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14. The computer program product of claim 13, further comprising:

logic code for loading an updated set of files after an update or status check is
complete.

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15. The computer program product of claim 13, wherein said logic code for
updating includes:

logic code for opening a communications session with a gateway or a remote server;
logic code for sending an update request to said gateway or said remote server;
logic code for receiving an update response, said response including at least
5 one difference file for updating said set of files;
logic code for closing said communications session; and
logic code for updating a local file system and said database based on said update response.

10 16. The computer program product of claim 15, wherein said logic code for updating a local file system and said database includes:

logic code for loading said at least one difference file into a random access memory;
logic code for loading a copy of said set of files into said random access
15 memory;
logic code for applying said at least one difference file on said set of files in said random access memory to obtain an updated set of files;
logic code for copying said updated set of files into said local file system;
logic code for removing said set of files from said local file system;
20 logic code for updating said database based on said updated set of files; and
logic code for removing said at least one difference file and said set of files from said random access memory.

25 17. The computer program product of claim 16, further comprising:

logic code for executing said updated set of files; and
logic code for removing said updated set of files from said random access memory.

30 18. The computer program product of claim 16, wherein said logic code for applying said at least one difference file includes:

logic code for parsing said at least one difference file to determine whether to add, modify, or delete a file in said set of files; and
logic code for updating said local file system and said database based on said parsing.

35 19. The computer program product of claim 15, further comprising:

logic code for parsing said update response for a broadcast message;
logic code for accessing and updating said database based on said broadcast message;

logic code for sending a broadcast response to said gateway or said remote server.

20. The computer program product of claim 19, wherein said logic code for accessing and updating includes:

logic code for selectively marking at least one set of files as out-of-date.

21. The computer program product of claim 13, wherein said logic code for performing a status check or update includes:

logic code for opening a communications session with a gateway or a remote server;

logic code for sending a status check or update request to said gateway or said remote server;

logic code for receiving a status check or update response from said gateway or said remote server;

logic code for closing said communications session; and

logic code for updating a local file system and a database if at least one difference file is included in said status check or update response.

22. The computer program product of claim 21, wherein said logic code for updating a local file system includes:

logic code for loading said at least one difference file into a random access memory;

logic code for loading a copy of said set of files into said random access memory;

logic code for applying said at least one difference file on said set of files in said random access memory to obtain an updated set of files;

logic code for copying said updated set of files into said local file system;

logic code for removing said set of files from said local file system;

logic code for updating said database based on said updated set of files; and

logic code for removing said at least one difference file and said set of files from said random access memory.

23. The computer program product of claim 22, wherein said logic code for applying said at least one difference file includes:

logic code for parsing said at least one difference file to determine whether to add, modify, or delete a file in said set of files; and

5 logic code for updating said local file system and said database based on said parsing.

24. The computer program product of claim 21, further comprising:

10 logic code for parsing said status check or update response for a broadcast message;

logic code for selectively marking at least one set of files as out-of-date based on said broadcast message; and

15 logic code for sending a broadcast response to said gateway or said remote server.

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